

CLAIMS

What is claimed is:

- 1           1.     A method for adjusting a binder laylength, the method  
2     comprising:  
3           positioning a plurality of buffer tubes with respect to each other  
4     wherein each buffer tube houses a plurality of fiber optic bundles;  
5           placing a detectable binder around one of the plurality of fiber optic  
6     bundles, wherein the detectable binder contains a physically detectable  
7     feature;  
8           detecting the detectable binder;  
9           calculating a distance value between at least two detectable points on  
10    the detectable binder;  
11          comparing the distance value to a stored value; and  
12          adjusting the binder laylength according to the difference between the  
13    distance value and the stored value while an operation is in progress.
- 1           2.     The method for adjusting a binder laylength of Claim 1,  
2     wherein the binder's physically detectable feature is a fluorescing element.
- 1           3.     The method for adjusting a binder laylength of Claim 1,  
2     wherein the binder's physically detectable feature is a color.

1       4.     The method for adjusting a binder laylength of Claim 1, wherein the  
2       binder's physically detectable feature is a magnetic or metal strip.

1       5.     The method for adjusting a binder laylength of Claim 1, wherein the  
2       binder's physically detectable feature is an identifiable marking.

1       6.     The method of adjusting the binder laylength of claim 1, wherein the  
2       said positioning step includes positioning the buffer tube around a central  
3       strength member.

1       7.     A method for determining a binder laylength, the method comprising:  
2       positioning a plurality of buffer tubes with respect to each other wherein each  
3       buffer tube houses a plurality of fiber optic bundles;  
4       placing a detectable binder around one of the plurality of fiber optic bundles,  
5       wherein the detectable binder contains a physically detectable feature;  
6       detecting the detectable binder; and  
7       calculating a distance value between at least two detectable points on the  
8       detectable binder.

1       8.     The method for determining a binder laylength of Claim 7, the method  
2       further comprising:  
3       comparing the distance value to a stored value; and

4           adjusting the binder laylength according to the difference between the  
5           distance value and the stored value while an operation is in progress thus  
6           resulting in the binder laylength being evaluated and adjusted on line.

1           9.     The method for determining a binder laylength of Claim 7, wherein the  
2           binder's physically detectable feature is a fluorescing element.

1           10.    The method for determining a binder laylength of Claim 7, wherein the  
2           binder's physically detectable feature is a color.

1           11.    The method for determining a binder laylength of Claim 7, wherein the  
2           binder's physically detectable feature is a magnetic or metal strip.

1           12.    The method for determining a binder laylength of Claim 7, wherein the  
2           binder's physically detectable feature is an identifiable marking.

1           13.    The method for determining a binder laylength of Claim 7, wherein  
2           said positioning step includes positioning the buffer tubes around a central  
3           strength member.

1       14.     A strander for manufacturing a fiber optic cable wherein the fiber optic  
2       cable has at least one buffer tube housing a plurality of fiber optic bundles, the  
3       strander comprising:

4             a binder wrapper for placing a detectable binder around the fiber optic  
5       bundles wherein the detectable binder has a physically detectable feature;

6             a detector for detecting the physically detectable feature; and

7             a value unit for calculating a distance value between at least two  
8       detectable points associated with the physically detectable feature on the  
9       detectable binder.

1       15.     The strander of Claim 14 further comprising;

2             a computer for calculating a difference value by comparing the  
3       distance value to a stored binder laylength parameter and thus adjusting the  
4       binder according to the difference value while the stranding operation is in  
5       progress thereby resulting in the binder laylength being evaluated and  
6       adjusted on line.

1       16.     The strander of Claim 14, wherein the binder's physically detectable  
2       feature is a fluorescing element.

1       17.     The strander of Claim 14, wherein the binder's physically detectable  
2       feature is a color.

1       18.     The strand of Claim 14, wherein the binder's physically detectable  
2       feature is a magnetic or metal strip.

1       19.     The strand of Claim 14, wherein the binder's physically detectable  
2       feature is an identifiable marking.

1       20.     A fiber optic cable binder comprising:  
2             a flexible material; and  
3             a physically detectable feature within the flexible material.

1       21.     The fiber optic cable binder of Claim 20, wherein the binder's  
2       detectable feature is detected by a detection system.

1       22.     The fiber optic cable of Claim 20, wherein the binder's physically  
2       detectable feature is a fluorescing element.

1       23.     The fiber optic cable of Claim 20, wherein the binder's physically  
2       detectable feature is a color.

1       24.     The fiber optic cable of Claim 20, wherein the binder's physically  
2       detectable feature is a magnetic or metal strip.

1       25.     The fiber optic cable of Claim 20, wherein the binder's physically  
2       detectable feature is an identifiable marking.

1       26.     A buffer tube comprising of:  
2             a plurality of individual optic fibers located within the buffer tube and  
3       arranged in a plurality of fiber optic bundles; and  
4             a detectable binder having an adjustable laylength wherein the  
5       detectable binder surrounds the fiber optic bundle.

1       27.     The buffer tube of Claim 25, wherein the binder is detectable due to a  
2       fluorescing element.

1       28.     The buffer tube of Claim 25, wherein the binder is detectable due to a  
2       distinguishing color.

1       29.     The buffer tube of Claim 25, wherein the binder is detectable due to a  
2       magnetic or metal strip.

30.     The buffer tube of Claim 25, wherein the binder is detectable due to a  
an identifiable marking.